

WHAT IS CLAIMED IS:

1. A rocker switch comprising:

5 a movable contact piece having a generally U-like shape, that is made of an elastic member;

a movable contact that is mounted on a portion of the movable contact piece near one end thereof;

10 a movable contact piece support member that comprises: a movable contact piece support for swingably supporting the movable contact piece; and a tab terminal hanging down from the movable contact piece support;

15 a pair of detents that is formed to project on the both side edges of the tab terminal of the movable contact piece support member in the direction of the width of the tab terminal at predetermined positions thereof;

a fixed contact piece that comprises: a fixed contact support on which a fixed contact is mounted; and a tab terminal hanging down from the fixed contact support;

20 a pair of detents that is formed to project on the both side edges of the tab terminal of the fixed contact piece in the direction of the width of the tab terminal at predetermined positions thereof;

25 a box that has its top opened and a slit formed through the bottom wall of the box, through which the tab terminal of the movable contact piece support member is pulled out toward the outside and a slit formed through the bottom wall of the box, through which the tab terminal of the fixed contact piece is pulled out toward the outside;

an operation button that comprises a movable contact piece actuator to be engaged with the movable contact piece and is

swingably mounted to the opening portion of the box; and

a recess that is formed on a portion of the movable contact piece near the other end thereof to extend in the direction of the width of the movable contact piece and has a generally circular arc-shape in section engaged with a generally circular arc-shaped tip in section of the movable contact piece actuator of the operation button, and

wherein the movable contact piece support member is engaged and secured on the bottom wall of the box by forcedly bending a pair of the detent pieces of the tab terminal thereof outwardly in the direction of the width thereof and engaging them, the tab terminal being pulled out toward the outside through the corresponding slit formed through the bottom wall of the box;

the fixed contact piece is engaged and secured on the bottom wall of the box by forcedly bending a pair of the detent pieces of the tab terminal thereof outwardly in the direction of the width thereof and engaging them, the tab terminal being pulled out toward the outside through the corresponding slit formed through the bottom wall of the box;

the operation button is swingably mounted to the opening portion of the box in the state that the generally circular arc-shaped tip in section of the movable contact piece actuator is engaged with the recess of a generally circular arc-shape in section of the movable contact piece; and

the movable contact piece actuator that is swingable with the swinging movement of the operation button causes the movable contact piece to be swung to the switch-on position where the movable contact thereof comes into contact with the fixed contact or the switch-off position where the movable contact thereof is away from

the fixed contact.

2. The rocker switch as set forth in claim 1, wherein  
the operation button further includes a rod-like member  
5 projecting beyond the tip of the movable contact piece actuator;  
the movable contact piece has an elongate aperture at a portion  
thereof near the recess, into which the forward end of the rod-like  
member of the operation button is inserted with a clearance or play  
therebetween; and  
10 the forward end of the rod-like member is inserted into the  
elongate aperture with a clearance or play therebetween when the  
operation button is swingably mounted to the opening portion of the  
box.

15 3. The rocker switch as set forth in claim 1, wherein  
the box has a generally rectangular or square shape in plan, a  
partition wall that isolates the tab terminal of the movable contact  
piece support member and the tab terminal of the fixed contact piece  
from each other, is formed on the bottom surface of the bottom wall of  
20 the box, the length of the partition wall is set to be substantially equal  
to those of the tab terminals, and the slits are formed obliquely in the  
bottom wall of the box from the vicinities of the corners thereof to  
form a predetermined angle with one side of the bottom wall  
respectively.

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4. The rocker switch as set forth in claim 2, wherein  
the box has a generally rectangular or square shape in plan, a  
partition wall that isolates the tab terminal of the movable contact

piece support member and the tab terminal of the fixed contact piece from each other, is formed on the bottom surface of the bottom wall of the box, the length of the partition wall is set to be substantially equal to those of the tab terminals, and the slits are formed obliquely in the  
5 bottom wall of the box from the vicinities of the corners thereof to form a predetermined angle with one side of the bottom wall respectively.

10 5. The rocker switch as set forth in claim 1, further including a conductive resilient piece that is swingably mounted on the movable contact piece support member, and wherein  
the conductive resilient piece is located, when the movable contact piece is swingably mounted on the movable contact piece support member, between the movable contact piece and the movable  
15 contact piece support member and is in electrically contact with both the movable contact piece support member and the movable contact piece.

20 6. The rocker switch as set forth in claim 2, further including a conductive resilient piece that is swingably mounted on the movable contact piece support member, and wherein  
the conductive resilient piece is located, when the movable contact piece is swingably mounted on the movable contact piece support member, between the movable contact piece and the movable  
25 contact piece support member and is in electrically contact with both the movable contact piece support member and the movable contact piece.

7. The rocker switch as set forth in claim 3, further including a conductive resilient piece that is swingably mounted on the movable contact piece support member, and wherein

the conductive resilient piece is located, when the movable  
5 contact piece is swingably mounted on the movable contact piece support member, between the movable contact piece and the movable contact piece support member and is in electrically contact with both the movable contact piece support member and the movable contact piece.

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8. The rocker switch as set forth in claim 4, further including a conductive resilient piece that is swingably mounted on the movable contact piece support member, and wherein

the conductive resilient piece is located, when the movable  
15 contact piece is swingably mounted on the movable contact piece support member, between the movable contact piece and the movable contact piece support member and is in electrically contact with both the movable contact piece support member and the movable contact piece.

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9. The rocker switch as set forth in claim 5, wherein the conductive resilient piece comprises: a sheet-like resilient piece body; a pair of opposed retentive pieces that substantially stand erect from the resilient piece body; and at least one pair of opposed  
25 protrusions that project outwardly and upwardly from the resilient piece body in the direction of forming generally right angles with a line connecting the retentive pieces, and

a pair of the retentive pieces is pressed and abutted against the

movable contact piece support member when the movable contact piece is swingably mounted on the movable contact piece support member, and at least one pair of the protrusions is pressed and abutted against the movable contact piece when the movable contact piece is  
5 swingably mounted on the movable contact piece support member through the resilient piece therebetween.

10. The rocker switch as set forth in claim 6, wherein  
the conductive resilient piece comprises: a sheet-like resilient  
10 piece body; a pair of opposed retentive pieces that substantially stand erect from the resilient piece body; and at least one pair of opposed protrusions that project outwardly and upwardly from the resilient piece body in the direction of forming generally right angles with a line connecting the retentive pieces, and  
15 a pair of the retentive pieces is pressed and abutted against the movable contact piece support member when the movable contact piece is swingably mounted on the movable contact piece support member, and at least one pair of the protrusions is pressed and abutted against the movable contact piece when the movable contact piece is  
20 swingably mounted on the movable contact piece support member through the resilient piece therebetween.

11. The rocker switch as set forth in claim 7, wherein  
the conductive resilient piece comprises: a sheet-like resilient  
25 piece body; a pair of opposed retentive pieces that substantially stand erect from the resilient piece body; and at least one pair of opposed protrusions that project outwardly and upwardly from the resilient piece body in the direction of forming generally right angles with a

line connecting the retentive pieces, and

a pair of the retentive pieces is pressed and abutted against the movable contact piece support member when the movable contact piece is swingably mounted on the movable contact piece support member, and at least one pair of the protrusions is pressed and abutted against the movable contact piece when the movable contact piece is swingably mounted on the movable contact piece support member through the resilient piece therebetween.

10           12. The rocker switch as set forth in claim 8, wherein  
the conductive resilient piece comprises: a sheet-like resilient piece body; a pair of opposed retentive pieces that substantially stand erect from the resilient piece body; and at least one pair of opposed protrusions that project outwardly and upwardly from the resilient  
15 piece body in the direction of forming generally right angles with a line connecting the retentive pieces, and

a pair of the retentive pieces is pressed and abutted against the movable contact piece support member when the movable contact piece is swingably mounted on the movable contact piece support member, and at least one pair of the protrusions is pressed and abutted against the movable contact piece when the movable contact piece is swingably mounted on the movable contact piece support member through the resilient piece therebetween.